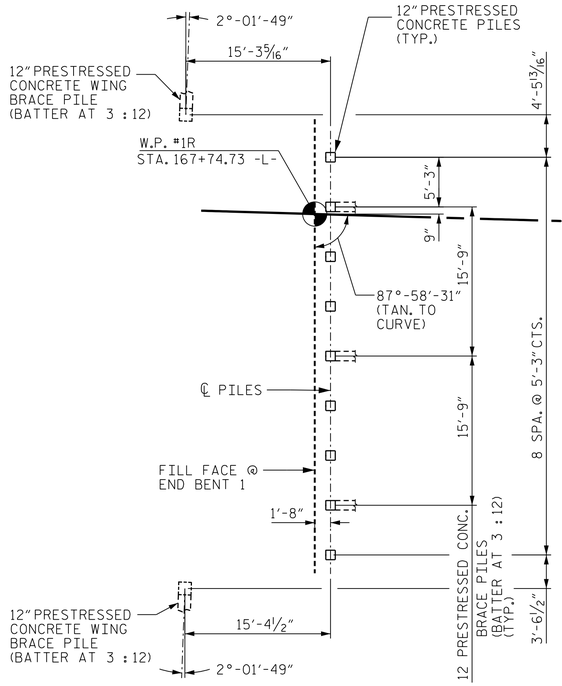
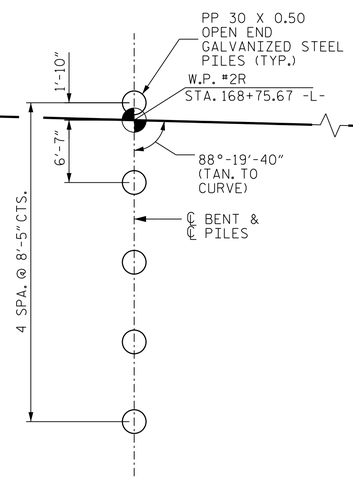
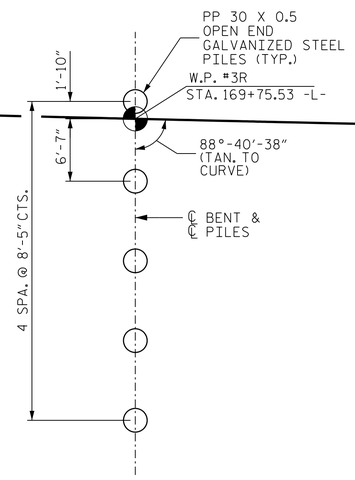


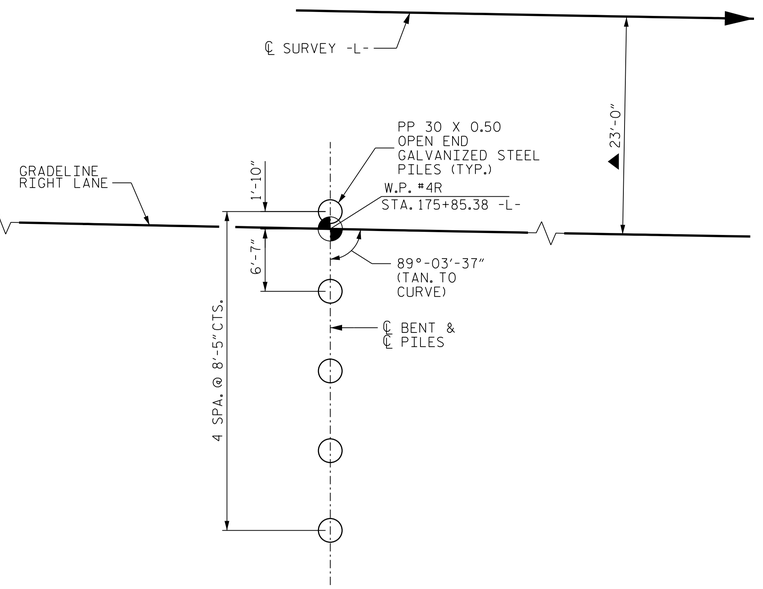
END BENT 1



BENT 1



BENT 2



BENT 3

FOUNDATION LAYOUT

▲ RADIAL DIMENSION

FOUNDATION NOTES:

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT NO. 1 AND END BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 90 TONS PER PILE.

DRIVE PILES AT END BENT NO. 1 AND END BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE.

PILES AT BENT NO. 1 THROUGH BENT NO. 10 ARE DESIGNED FOR A FACTORED RESISTANCE OF 280 TONS PER PILE.

DRIVE PILES AT BENT NO. 1 THROUGH BENT NO. 4 TO A REQUIRED DRIVING RESISTANCE OF 415 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAG OR SCOUR.

DRIVE PILES AT BENT NO. 5 THROUGH BENT NO. 10 TO A REQUIRED DRIVING RESISTANCE OF 395 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAG OR SCOUR.

INSTALL PILES AT BENT NO. 1 THROUGH BENT NO. 4 TO A TIP ELEVATION NO HIGHER THAN -36.0 FT.

INSTALL PILES AT BENT NO. 5 THROUGH BENT NO. 10 TO A TIP ELEVATION NO HIGHER THAN -28.0 FT.

STEEL PIPE PILE CUTTING SHOES ARE REQUIRED FOR STEEL PIPE PILES AT BENT NO. 1 THROUGH BENT NO. 10. USE ''INSIDE FIT'' PIPE PILE CUTTING SHOES. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT NO. 1 THROUGH BENT NO. 4 IS ELEVATION -9.0 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE SCOUR CRITICAL ELEVATION FOR BENT NO. 5 THROUGH BENT NO. 10 IS ELEVATION 0.0 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

TESTING THE FIRST PRODUCTION PILE WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT END BENT NO. 1. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

TESTING THE FIRST PRODUCTION PILE WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT BENT NO. 1 THROUGH BENT NO. 10. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 100-180 FT-KIPS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT NO. 1 THROUGH BENT NO. 10. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.

SPECIAL NOTES:

IF NECESSARY, PREDRILL PILE LOCATIONS AT BENT NO. 1 THROUGH BENT NO. 4 TO AN ELEVATION NO LOWER THAN ELEVATION -36 FT WITH EQUIPMENT THAT WILL RESULT IN A MAXIMUM PREDRILLING DIAMETER OF 30". FOR PREDRILLING FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

IF NECESSARY, PREDRILL PILE LOCATIONS AT BENT NO. 5 THROUGH BENT NO. 10 TO AN ELEVATION NO LOWER THAN ELEVATION -28 FT WITH EQUIPMENT THAT WILL RESULT IN A MAXIMUM PREDRILLING DIAMETER OF 30". FOR PREDRILLING FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

CONTRACTOR MAY PREDRILL THROUGH THE CENTER OF THE 30" DIA. STEEL PIPE PILES WITH CUTTING SHOES TO ELEVATIONS AS NOTED IN THE PLANS AT BENT NO. 1 THROUGH BENT NO. 10.

PROJECT NO. R-2514B

ONSLOW/JONES COUNTY

STATION: 173+54.46 -L-

SHEET 4 OF 8

STR. #5

DRAWN BY : M. HOGAN DATE : 03/14

CHECKED BY : R. COFFMAN DATE : 09/14

DESIGN ENGINEER OF RECORD : P. HOLSHOUSER DATE : 10/14

NORTH CAROLINA PROFESSIONAL SEAL 20668 ENGINEER PAUL R. HOLSHOUSER

DocuSigned by: Paul R. Holshouser 1C5F9484FEC444D... 2/3/2015

The LOUIS BERGER GROUP, Inc.
1001 Wade Avenue, Suite 400
Raleigh, NC 27605-3322
NC COA No. F-0840

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON PROPOSED US 17 BYPASS OVER WHITE OAK RIVER BETWEEN SR 1331 AND SR 1116 (RIGHT LANE)

REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. S5-4

TOTAL SHEETS 75

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